

MODIS IOT Weekly Report

Mission Operations Days: 2000/232 to 2000/238

August 18, 2000 20:00:00 GMT to August 25, 2000 20:00:00 GMT

Terra Spacecraft and MODIS Instrument Status:

Terra (AM-1) is in Normal Mode

MODIS is in Science Mode

Blackbody	A On; B Off	Nominal
Calibration Electronics	A On; B Off	Nominal
Control Processor	A On; B Off	Nominal
Door: Nadir	Unlatched, open	Nominal
Space View	Unlatched, open	Nominal
Solar Diffuser	Unlatched, closed	Nominal
FDDI Formatter	A On; B off	Nominal
FIFO Memory	1 & 2 On; 3 & 4 Off	Nominal
Format Processor	A On; B off	Nominal
PC FPA	A On	Nominal
Power Supply:1	On	Nominal
2	Off	Nominal
PV FPAs: VIS	A On	Nominal
NIR	A On	Nominal
SMIR	A On	Nominal
LWIR	A On	Nominal
Radiative Cooler:		
Outgas Heaters	Off	Nominal
LWIR FPA Heater	On	Nominal
SMIR FPA Heater	Off	Nominal
Scan Assembly	A On; B off	Nominal
SDSM	Off	Nominal
SRCA	Off	Nominal
Survival Heaters: PS1	Enabled	Nominal
PS2	Enabled	Nominal
Timing Generator	A On; B Off	Nominal
Flight Software	Rev BD + 2 patches	Nominal
Inhibit Ids Set	31,32	Blackbody & Calibration Electronics
TMONs enabled	66,67, 68	Nominal

This Week's Completed MODIS Activities:

Friday, August 18, 2000

231/22:38 Real-Time -- Memory Load
('AM1_MPR_MODIS_LIMIT_255',1,'N','DISABLE',1,1)

231/22:40 Real-Time -- Memory Dump (6,16,45312,0,1,1)
231/22:41 Real-Time -- Memory Dump (6,16,45568,0,1,1)

Saturday, August 19, 2000

232/01:04 Real-Time -- Memory Dump (6,256,45312,0,1,8)
232/01:06 Real-Time -- Memory Dump (6,256,45568,0,1,8)
232/20:40 Real-Time -- Memory Load
('AM1_MPR_MODIS_LIMIT_15',1,'N','DISABLE',1,1)
232/20:41 Real-Time -- Memory Dump (6,16,45312,0,1,1)
232/20:42 Real-Time -- Memory Dump (6,16,45568,0,1,1)
232/20:43 Real-Time -- Turn on Blackbody A-side
232/20:44 Real-Time -- Set Blackbody temperature to 290K
232/20:49 Real-Time -- Set SMIR Itwk/Vdet to 110/226
232/20:53 Real-Time -- Set Blackbody duty cycle to THIRD
232/20:5? Enabled Blackbody temperature alarms

Sunday, August 20, 2000

None

Monday, August 21, 2000

234/22:16 Real-Time -- Enabled TMON 68, new FIFO TMON

Tuesday, August 22, 2000

235/16:59:38 Real-Time -- Memory Dump (6,16,45312,0,1,1)
235/17:00:30 Real-Time -- Memory Dump (6,16,45568,0,1,1)
235/17:01:27 Real-Time -- Memory Dump (6,16,45312,0,1,1)
235/17:02:23 Real-Time -- Memory Dump (6,16,45568,0,1,1)

Wednesday, August 23, 2000

236/21:11 Real-Time -- Clear Inhibit ID #31 (Calibration Electronics)
236/21:12 Real-Time -- Clear Inhibit ID #32 (Blackbody)

Thursday, August 24, 2000

None

Friday, August 25, 2000

238/13:25:30 - 13:39:30 Real-Time SMIR Vdet sweep, Itwk = 79, Vdet = 50-230 by 15dn
238/13:40:40 Real-Time Set SMIR Itwk/Vdet to 110/226
238/14:12:10 - 14:20:22 Real-Time SMIR Vdet sweep, Itwk = 90, Vdet = 50-230 by 15dn
238/14:21:50 Real-Time Set SMIR Itwk/Vdet to 110/226

238/15:04:53 - 15:13:04	Real-Time SMIR Vdet sweep, Itwk = 105, Vdet = 50-230 by 15dn
238/15:14:10 - 15:22:21	Real-Time SMIR Vdet sweep, Itwk = 120, Vdet = 50-230 by 15dn
238/15:23:32	Real-Time Set SMIR Itwk/Vdet to 110/226

This Week's Scheduled MODIS Activities Not Completed:

None

Upcoming MODIS Events:

None

Maneuvers:

The next roll maneuver to view the moon through the space view port is scheduled for September 18th.

MODIS Anomalies:

The formatter anomaly investigation has continued. Over the weekend, the temperature of the formatter increased (the FIFOs were powered the entire time). At the same time, the number of error events decreased. The errors, which originally occurred about once every eight seconds, decreased to a rate of about six per hour. At approximately 8:00pm EDT August 19th, the formatter errors ceased occurring.

General Instrument Comments:

MODIS is in Science Mode on the A-side with the SVD and NAD open.

MODIS Telemetry Trends:

The formatter has warmed to near its pre-anomaly temperature. It currently oscillates between -1 and 0 Centigrade.

The LWIR focal plane heater voltage fluctuates between 5.5 and 6.5 Volts, but the daily average voltage appears to be stable.

Non-MODIS Significant Events:

None

Limited Life Item Status:

SRCA 10W Lamp #1: 173.3 of 500 hours

SRCA 10W Lamp #2: 135.9 of 500 hours

SRCA 10W Lamp #3: 145.1 of 500 hours

SRCA 10W Lamp #4: 61.5 of 500 hours

SRCA 1W Lamp #1: 555.8 of 4000 hours

SRCA 1W Lamp #2: 276.3 of 4000 hours

Solar Diffuser Door: 1393 of 3022 Movements

Nadir Aperture Door: 532 of 1316 Movements

Space View Door: 437 of 1316 Movements